FOOD CONSUMPTION PATTERN OF CHILDREN AT WAKEFIELD PRIMARY SCHOOL IN TRELAWNY, JAMAICA

Tabitha Muchee 1, MSc, PhD. James Fallah1, MD, MPH, DHSc. Paul Bourne1, BSc, MSc and Vinola Richards 1, MA, RDN.
Department of Nutrition, Dietetics and Food Science, Northern Caribbean University
Jamaica. W.I.

1. INTRODUCTION

According to World Hunger Education Services (2016), malnutrition is a risk factor to mortality and morbidity afflictions millions of children globally. In developing countries diet fed to children lacks in variety of nutrients and becomes a major factor to malnutrition and yet, physiological development requires adequate nutrients to meet the growth demands (Kennedy 2007).

Food consumed by the school age children should be adequate to meet their physiological needs and cognitive development as this is the most critical period of child’s growth. At this age, food consumed should be diverse since dietary diversity has been correlated with the improved nutrition status of children (Nii, C. (2011)).

Understanding the food consumption patterns of school age children can be useful in the overall improvement of their nutrition status. The results of the study can assist in the efforts to improve food environments in primary school and homes that provide substantial proportions of daily dietary intakes for children as recommended by Food Based Dietary Guidelines for Jamaica (2015).

The results of this study revealed that, children respondents consumed below the recommended food based dietary guidelines for Jamaica in all the food groups except the consumption of sugar which was above the recommended guidelines. There was significance relationship between age of children and their food consumption pattern. The younger the children, the more they depend on their care givers in their choices of food consumption. And since the age correlate with the food consumption pattern, parents and school administrators should be trained on healthy eating so that they can influence the eating patterns of children.

The main purpose of this study was to find out the food consumption pattern of children at Wakefield primary school in Trelawny. Specifically, the study investigated the relationship of children’s profile and food consumption pattern.

2. METHOD

The study used a correlational design for the purpose of describing existing relationship of independent variables (student profile) and dependent variables (food consumption pattern).

The study used both probability and non probability to come up with the sample size from 2019-2020 calendar year. A self-constructed questionnaire was used to collect data from the subjects. The food consumption pattern of children was analyzed by calculating the energy needs met by each food group in the last consumption pattern of children was analyzed by calculating the energy needs met by each food group in the last 24 hours food recall using Food Based Dietary Guidelines for Jamaica (2015).

Data was analyzed using a statistical package for social sciences (SPSS) version 22.

3. RESULTS

The children participant consumed below the recommended Jamaican daily allowance in all the food groups except sugars that was above the recommended allowance. The total daily Kcal consumed (1025) kcal was far below the recommended kcal of 2200 Kcal.

Table 1: Mean Kcalories

<table>
<thead>
<tr>
<th>Carbohydrates/ staples</th>
<th>Legumes and Nuts</th>
<th>Animals</th>
<th>Vegetables</th>
<th>Fruits</th>
<th>Fats</th>
<th>Sugars</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>419</td>
<td>53</td>
<td>199</td>
<td>38</td>
<td>27</td>
<td>136</td>
<td>167</td>
</tr>
<tr>
<td>RDA Jamaica</td>
<td>980</td>
<td>219</td>
<td>375</td>
<td>108</td>
<td>120</td>
<td>270</td>
<td>128</td>
</tr>
</tbody>
</table>

Table 2: Relationship between independent variables and dependent variables

The relationship between independent variables and dependent variables showed that, only age is a significant predictor of food consumption of the respondents (P=0.018). The younger the children, the more they depend on their care givers in their choices of food consumption.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized B</th>
<th>Coefficients Std. Error</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-379.489</td>
<td>461.848</td>
<td>-0.070</td>
<td>000</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-101.325</td>
<td>82.914</td>
<td>-2.412</td>
<td>018</td>
<td></td>
</tr>
<tr>
<td>Father Education</td>
<td>72.512</td>
<td>116.974</td>
<td>0.621</td>
<td>536</td>
<td></td>
</tr>
<tr>
<td>Mother Education</td>
<td>55.315</td>
<td>88.452</td>
<td>0.563</td>
<td>509</td>
<td></td>
</tr>
<tr>
<td>Body Mass Index</td>
<td>16.124</td>
<td>12.264</td>
<td>-1.315</td>
<td>192</td>
<td></td>
</tr>
</tbody>
</table>

4. CONCLUSION

The consumption of all the food groups was below the recommended daily allowance except sugars that was above the Jamaican recommended dietary allowance. This results are supported by Walker (1997) in a study of schoolchildren’s diets and participation in school feeding programmes in Jamaica which found that snacks and sweets were the most common types of lunch eaten by the children. Sweets add calories to the diet which is considered as energy dense foods with low nutritional quality and are seen as an important contributor to childhood obesity as noted in the study done by Institute of Medicine (2012). The low consumption of fruits and vegetables is an indicator that the children require macro and micronutrients and vitamins for healthy growth and development.

The relationship between children’s profile and food consumption pattern showed that age is a weak predictor of food consumption. The results shows that primary school age children are more likely to consume meals provided in school because their eating habit correlates with their age. Their food consumption pattern depends on what is provided to them. The health choices should be instilled in children’s mind when they are still young. And since the age correlate with the food consumption pattern, parents and school administrators should be trained on healthy eating so that they can influence the eating patterns of children.

5. ACKNOWLEDGEMENT

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6. REFERENCES


Walker et al. (1997). Schoolchildren’s Diets and participation in school Feeding Programmes in Jamaica. Tropical Metabolism Research Unit, University of the West Indies, Jamaica. Centre for In-